

## Patent claims:

1. A process for preparing antimicrobial polymers, characterized in that aliphatically unsaturated monomers which have been at least singly functionalized by means of a tertiary amino group are polymerized.
2. The process as claimed in claim 1, characterized in that use is made of aliphatic unsaturated monomers functionalized by means of a tertiary amino group and having the general formula
- $$R_1NR_2R_3$$
- where  $R_1$  is a branched, unbranched or cyclic, saturated or unsaturated hydrocarbon radical having up to 50 carbon atoms which may have substitution by O atoms, N atoms or S atoms, and  $R_2$  and  $R_3$  are identical or different and are branched, unbranched or cyclic, saturated or unsaturated hydrocarbon radicals having up to 25 carbon atoms, which may have substitution by O atoms, N atoms or S atoms.
3. The process as claimed in one of claims 1 and 2, characterized in that the polymerization is carried out with other aliphatically unsaturated monomers selected from the group consisting of acrylates and methacrylates, for example acrylic acid, tert-butyl methacrylate or methyl methacrylate, styrene, vinyl chloride, vinyl ethers, acrylamides, acrylonitriles, allyl compounds, vinyl ketones, vinylacetic acid, vinyl acetates and vinyl esters.
4. The process as claimed in one of claims 1 to 3, characterized in that the polymerization is carried out on a substrate.
5. The process as claimed in one of claims 1 to 4, characterized in that the polymerization is carried out as a graft polymerization of a substrate.
6. The process as claimed in claim 5,

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characterized in that  
prior to the graft polymerization the substrate is activated by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or  $\gamma$ -radiation.

7. The process as claimed in claim 5,  
characterized in that  
prior to graft polymerization the substrate is activated by UV radiation with a photosensitizer.
8. The use of antimicrobial polymers prepared as claimed in one of claims 1 to 7 for producing products with an antimicrobial coating of the polymer.
9. The use of antimicrobial polymers prepared as claimed in one of claims 1 to 7 for producing items for medical technology with an antimicrobial coating of the polymer.
10. The use of antimicrobial polymers prepared as claimed in one of claims 1 to 7 for producing hygiene items with an antimicrobial coating of the polymer.
11. The use of antimicrobial polymers prepared as claimed in one of claims 1 to 7 for producing surface coatings, protective paints or other coatings.

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